

BEAM HARDENING POST-PROCESSING METHOD AND X-RAY CT  
APPARATUS

ABSTRACT OF THE DISCLOSURE

5        For the purpose of providing a beam hardening post-processing method  
that can improve the accuracy of channel-by-channel correction on a BH effect  
easily and yet taking a non-linear effect into account, phantoms of different  
diameters are disposed at a position offset from an imaging center to acquire  
projection information having a transmission length of an X-ray beam varying  
10    from view to view (Step S501), hence, acquire projection information having a  
projection information value varying from view to view, for each channel,  
correction factors are determined (Step S506), and a corrective function  
containing even a non-linear effect is determined by higher-order function fitting  
from the correction factors (Step S508); and therefore, correction with high  
15    accuracy can be achieved in the channel-by-channel correction on the projection  
information values conducted after BH correction, and moreover, correction with  
high accuracy can be achieved using a smaller amount of phantom projection  
information, thus reducing the time for calibration work.